EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

This supplemental examiner's amendment is intended to replace the examiner's amendment filed July 22, 2010.

Authorization for this examiner's amendment was given in a telephone interview with J. Steven Rutt on June 29, 2010 and Bruce Wu on August 27, 2010.

The application has been amended as follows:

Please rejoin withdrawn claims 3, 4, 6, 8-13, 15, 16, 18, 20, 22, 28-33, 43, 45, 47-51, 53, 54, 56, 58, 60, 66-70, 73-79, 86, 116,

Please amend the claims as follows:

3. A method according to claim 1, wherein the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds improves scan speed.

4. A method according to claim 1, wherein the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds improves resolution.

8. A method according to claim 1, wherein the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds is one or more silane compounds.

9. A method according to claim 1, wherein the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds is electrostatically charged.

10. A method according to claim 1, wherein the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds is negatively charged.

11. A method according to claim 1, wherein the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds forms a self-assembled monolayer on the tip.

12. A method according to claim 1, wherein the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds forms a self-assembled monolayer on the tip and is negatively charged.

13. A method according to claim 1, wherein the tip is coated with metal and the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds forms a self-assembled monolayer on the metal-coated tip and is negatively charged.

18. The method according to claim 1, wherein the substrate surface is adapted before deposition to covalently bond to the protein patterning compound.

19. The method according to claim 1, wherein the substrate surface is adapted to chemisorb to the protein patterning compound.

20. The method according to claim 1, wherein the substrate surface is adapted to electrostatically bond to the protein patterning compound.

28. The method according to claim 1, wherein the protein patterning compound is a simple protein.

29. The method according to claim 1, wherein the protein patterning compound is a conjugated protein.

30. The method according to claim 1, wherein the protein patterning compound is a globularprotein.

31. The method according to claim 1, wherein the protein patterning compound is a fibrous protein.

32. The method according to claim 1, wherein the protein patterning compound is an enzyme.

33. The method according to claim 1, wherein the protein patterning compound is a viral protein.

34. The method according to claim 1, wherein the protein patterning compound is complexed with other protein, polypeptide, peptide, or nucleic acid.

35. The method according to claim 1, wherein the protein patterning compound is applied to the tip using a solution of protein comprising an additive, wherein the additive improves application

to the tip, improves protein deposition, or improvise retention of protein biological activity upon application to the surface

37. The method according to claim 1, wherein the lithography is [[a]] nanolithography, the tip is an atomic force microscopic tip~~, the tip~~ and is modified to inhibit peptide adsorption, and the ~~chemical agent is~~ selected hydrophilic polyalkylene glycol compounds are electrostatically charged.

42. A method according to claim 40, wherein the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds improves scan speed.

43. A method according to claim 40, wherein the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds improves resolution.

47. A method according to claim 40, wherein the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds is one or more silane compounds.

49. A method according to claim 40, wherein the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds forms a self-assembled monolayer on the tip.

50. A method according to claim 40, wherein the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds forms a self-assembled monolayer on the tip and is negatively charged.

51. A method according to claim 40, wherein the tip is coated with metal and the ~~chemical agent~~ selected hydrophilic polyalkylene glycol compounds forms a self-assembled monolayer on the metal-coated tip and is negatively charged.

56. The method according to claim 40, wherein the substrate surface is adapted to covalently bond to the peptide patterning compound.

57. The method according to claim 40, wherein the substrate surface is adapted to chemisorb to the peptide patterning compound.

58. The method according to claim 40, wherein the substrate surface is adapted to electrostatically bond to the peptide patterning compound.

66. The method according to claim 40, wherein the peptide patterning compound is a simple peptide.

67. The method according to claim 40, wherein the peptide patterning compound is a complex

peptide.

68. The method according to claim 40, wherein the peptide patterning compound comprises a protein.

69. The method according to claim 40, wherein the peptide patterning compound comprises an oligopeptide.

70. The method according to claim 40, wherein the peptide patterning compound comprises a polypeptide.

71. The method according to claim 40, wherein the peptide patterning compound is in combination with non-peptide units.

72. The method according to claim 40, wherein the peptide patterning compound comprises a single polypeptide chain.

73. The method according to claim 40, wherein the peptide patterning compound comprises multiple polypeptide chains.

74. The method according to claim 40, wherein the peptide patterning compound includes ten or less peptide bonds.

75. The method according to claim 40, wherein the peptide patterning compound comprises at least 100 peptide.

76. The method according to claim 40, wherein the peptide patterning compound comprises a globular protein.

77. The method according to claim 40, wherein the peptide patterning compound comprises a fibrous protein.

78. The method according to claim 40, wherein the peptide patterning compound comprises an enzyme.

79. The method according to claim 40, wherein the peptide patterning compound comprises an virus.

80. The method according to claim 40, wherein the peptide patterning compound comprises a antibody.

81. The method according to claim 40, wherein the peptide patterning compound is applied to the tip using a solution of protein comprising an additive, wherein the additive improves

application to the tip, improves protein deposition, or improvise retention of protein biological activity upon application to the surface

84. The method according to claim 40, wherein the tip is modified to inhibit peptide adsorption, the ~~chemical agent is~~ selected hydrophilic polyalkylene glycol compounds are electrostatically charged, and the nanoscopic tip is a scanning probe microscope tip.

86. The method according to claim 85, wherein the peptide patterning compound comprises an oligopeptide.

87. The method according to claim 40, wherein the tip is modified to inhibit peptide adsorption, the ~~chemical agent is~~ selected hydrophilic polyalkylene glycol compounds are electrostatically charged, and the nanoscopic tip is an atomic force microscope tip.

120. A method of depositing a plurality of different protein nanoscopic deposits, comprising direct write nanolithographic writing of the protein with nanoscopic tips treated with one or more hydrophilic compounds ~~which~~ that inhibit protein adsorption, wherein the average distance between the nanoscopic deposits is about 500 nm or less, wherein the writing step is carried out at a rate of at least about 85 dots per four minutes per tip.

123. A method for generating protein arrays comprising depositing from a nanoscopic tip dots of proteins onto a substrate at a rate of at least about 85 dots per four minutes per tip; wherein the tip is modified by one or more hydrophilic compounds ~~which~~ that inhibit protein adsorption to improve deposition of the selected peptide patterning compound to the substrate surface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson Yang whose telephone number is (571)272-0826. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Shibuya can be reached on (571)272-0806. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Nelson Yang/
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